ELSEVIER

Powder Technology 91 (1997) 255

POWDER TECHNOLOGY

# Author Index of Volume 91

Abu-Ali, M.H., 43
Alexander, A., 165
Alsop, S., 157

Bergougnou, M.A., 1
Bitaud, B., 229
Bošković, S., 49
Botterill, J.S.M., 209
Bouard, R., 123
Briens, C.L., 1
Briens, L.A., 1
Broadbent, C.J., 209
Brone, D., 165
Byrne, B., 131

Caram, H.S., 83
Chen, X., 11
Comino, P.R., 17
Connor, K., 165
Cooke, S.L., 1
Coulthard, J.M., 157
Cournil, M., 197
Crawley, G., 197
Crooks, M., 123

Delebarre, A., 229
Deng, Q., 31
Di Benedetto, D., 197
Doheim, M.A., 43
Douglas, G.K., 17

Endo, Y., 25

Garncarek, Z., 209

Hamaguchi, Y., 147
Han, K., 11
Harris, C.C., 173
Hasebe, S., 25
Hong, J., 115
Hundal, H.S., 217
Hutchison, R.B., 55
Hwang, K.-J., 105

Jin, Y., 189
Jo, Y.M., 55

Kaga, H., 147
Katayama, H., 147
Kavanagh, P.E., 17
Keningley, S.T., 95
Kiss, Š., 49
Knight, P.C., 95
Kostić, E., 49
Kousaka, Y., 25
Krstulović, R., 69

Li, Y., 11
Liu, H., 31
Lu, F., 189
Lu, W.-M., 105
Lu, Y., 11

Mabrouk, S.A., 43
Margaritis, A., 1
Marson, A.D., 95
Matchett, A.J., 157
Mi, W., 11
Miccio, F., 237
Miccio, M., 237
Mukaida, K., 147
Muzzio, F.J., 165

Okasha, F., 237

Peace, J., 157
Peng, X., 141
Perić, J., 69
Pierrat, P., 83
Pons, M.N., 217
Przybylski, L., 209

Raper, J.A., 55
Regnier, M.-C., 229
Robinson, P., 165
Rohani, S., 217

Saxena, S.C., 181
Shalliker, R.A., 17
Sharma, K.R., 75
Smith, K.L., 181
Somasundaran, P., 173

Tashiro, H., 141
Tavman, I.H., 63
Taya, Y., 147
Tomita, Y., 141

Vučak, M., 69

Wang, F., 11
Wang, P., 11
Wei, F., 189
Wightman, C., 165
Wood, H.C., 217
Wu, W.Y., 181
Wu, Y.-S., 105

Yan, Y., 131
Yu, Z., 189

Zec, S., 49
Zheng, J., 173
Zhu, J.-X., 115

Elsevier Science S.A.

ELSEVIER

Powder Technology 91 (1997) 257–259

POWDER TECHNOLOGY

# Subject Index of Volume 91

Additives
the effect of additives on stirred media milling of limestone, 173
Adhesion
dispersion of aggregates of fine powder by acceleration in an air stream and its application to the evaluation of adhesion between particles, 25
Admixtures
rheology of a magnetically stabilized bed consisting of mixtures of magnetic and non-magnetic particles, 181
Agglomeration
an investigation into the effects of binder viscosity on agglomeration behaviour, 95
Aggregates
dispersion of aggregates of fine powder by acceleration in an air stream and its application to the evaluation of adhesion between particles, 25
Aluminium oxide phase transformation
mechanical activation of the gamma to alpha transition in $Al_2O_3$, 49

Binders
an investigation into the effects of binder viscosity on agglomeration behaviour, 95
Blender
using flow perturbations to enhance mixing of dry powders in V-blenders, 165
Bubbling velocity
rheology of a magnetically stabilized bed consisting of mixtures of magnetic and non-magnetic particles, 181

Cakes
effect of the size distribution of spheroidal particles on the surface structure of a filter cake, 105
Calcination
examination of various pore size zirconias for potential chromatographic applications, 17
Carbonation
precipitation of calcium carbonate in a calcium nitrate and monoethanolamine solution, 69
Ceramics
characterization of ceramic composite membrane filters for hot gas cleaning, 55
Channelling
characterization of channelling in multiphase systems. Application to a liquid fluidized bed of angular Biobone particles, 1
Characterization
tensile strength of wet granular materials, 83
Chromatography
examination of various pore size zirconias for potential chromatographic applications, 17
Circulating beds
behavior of gas–solid flow in the downcomer of a circulating fluidized bed reactor with a V-valve, 11
mass flux profiles in a high density circulating fluidized bed, 189
Coal logs
analysis of coal log ram extrusion, 31
Coating layers
physical preparation of metal–oxide composite particles under vacuum, 147
Cohesive properties
elastic and cohesive properties of wet particulate materials, 157
Combustion
formation rates of characteristic carbon phases during fuel–water slurry injection in a hot fluidized bed, 237
Compaction
analysis of coal log ram extrusion, 31
Composites
thermal and mechanical properties of copper powder filled poly(ethylene) composites, 63
physical preparation of metal–oxide composite particles under vacuum, 147
Conduction
relative contributions from particle conduction and gas convection to the heat transfer coefficient between dense gas–solid fluidized beds and surfaces, 75
Conductivity
characterization of channelling in multiphase systems. Application to a liquid fluidized bed of angular Biobone particles, 1
Convection
relative contributions from particle conduction and gas convection to the heat transfer coefficient between dense gas–solid fluidized beds and surfaces, 75
Conveying
measurement of solids deposition in pneumatic conveying, 131
Crystallization
size analysis of fine particle suspensions by spectral turbidimetry: potential and limits, 197

Dense phase
effect of pipe orientation on dense-phase transport. I. Critical angle in inclined upflow, 115
Deposition
measurement of solids deposition in pneumatic conveying, 131
Dispersion
dispersion of aggregates of fine powder by acceleration in an air stream and its application to the evaluation of adhesion between particles, 25
Distributors
a quantitative assessment of the effect of distributor type on particle circulation, 209
Downcomers
behavior of gas–solid flow in the downcomer of a circulating fluidized bed reactor with a V-valve, 11

Elastic properties
elastic and cohesive properties of wet particulate materials, 157

Elsevier Science S.A.

Extrusion
analysis of coal log ram extrusion, 31

Filled polymers
thermal and mechanical properties of copper powder filled poly(ethylene) composites, 63
Filters
characterization of ceramic composite membrane filters for hot gas cleaning, 55
Filtration
effect of the size distribution of spheroidal particles on the surface structure of a filter cake, 105
Flow
behavior of gas–solid flow in the downcomer of a circulating fluidized bed reactor with a V-valve, 11
determination of the pressure drop coefficients in gas–solid diphasic flow in sharp bends, 123
Flow measurement
measurement of solids deposition in pneumatic conveying, 131
Flow regimes
mass flux profiles in a high density circulating fluidized bed, 189
Fluidization surfaces
relative contributions from particle conduction and gas convection to the heat transfer coefficient between dense gas–solid fluidized beds and surfaces, 75
Fluidized beds
characterization of channelling in multiphase systems. Application to a liquid fluidized bed of angular Biobone particles, 1
behavior of gas–solid flow in the downcomer of a circulating fluidized bed reactor with a V-valve, 11
relative contributions from particle conduction and gas convection to the heat transfer coefficient between dense gas–solid fluidized beds and surfaces, 75
rheology of a magnetically stabilized bed consisting of mixtures of magnetic and non-magnetic particles, 181
mass flux profiles in a high density circulating fluidized bed, 189
a quantitative assessment of the effect of distributor type on particle circulation, 209
gas–solid suspensions flowing through a granular bed, 229
formation rates of characteristic carbon phases during fuel–water slurry injection in a hot fluidized bed, 237
Flux profiles
mass flux profiles in a high density circulating fluidized bed, 189
Fourier descriptors
particle shape characterization using image analysis and neural networks, 217
Fractals
characterization of channelling in multiphase systems. Application to a liquid fluidized bed of angular Biobone particles, 1
Fuel–solids interactions
formation rates of characteristic carbon phases during fuel–water slurry injection in a hot fluidized bed, 237

Gas cleaning
characterization of ceramic composite membrane filters for hot gas cleaning, 55
Granular flow
using flow perturbations to enhance mixing of dry powders in V-blenders, 165
Granulation
an investigation into the effects of binder viscosity on agglomeration behaviour, 95
Grinding
mechanical activation of the gamma to alpha transition in $Al_2O_3$, 49
the effect of additives on stirred media milling of limestone, 173

Heat transfer
relative contributions from particle conduction and gas convection to the heat transfer coefficient between dense gas–solid fluidized beds and surfaces, 75

Image analysis
particle shape characterization using image analysis and neural networks, 217
Inclined pipelines
effect of pipe orientation on dense-phase transport. I. Critical angle in inclined upflow, 115
Inhomogeneity index
a quantitative assessment of the effect of distributor type on particle circulation, 209

Jets
characterization of channelling in multiphase systems. Application to a liquid fluidized bed of angular Biobone particles, 1

Light scattering
size analysis of fine particle suspensions by spectral turbidimetry: potential and limits, 197

Magnetically stabilized beds
rheology of a magnetically stabilized bed consisting of mixtures of magnetic and non-magnetic particles, 181
Magnetic field intensity
rheology of a magnetically stabilized bed consisting of mixtures of magnetic and non-magnetic particles, 181
Mechanical activation
mechanical activation of the gamma to alpha transition in $Al_2O_3$, 49
Mechanical properties
thermal and mechanical properties of copper powder filled poly(ethylene) composites, 63
Membranes
characterization of ceramic composite membrane filters for hot gas cleaning, 55
Milling
the effect of additives on stirred media milling of limestone, 173
Mixers
an investigation into the effects of binder viscosity on agglomeration behaviour, 95
Mixing
using flow perturbations to enhance mixing of dry powders in V-blenders, 165
a quantitative assessment of the effect of distributor type on particle circulation, 209
Modelling
investigation and modelling of sedimentation of mixed particles, 43
Moulds/dies
analysis of coal log ram extrusion, 31

Neural networks
particle shape characterization using image analysis and neural networks, 217
Non-isokinetic sampling
mass flux profiles in a high density circulating fluidized bed, 189

Packed beds
gas–solid suspensions flowing through a granular bed, 229
Packing
effect of the size distribution of spheroidal particles on the surface structure of a filter cake, 105
Particle temperature rise
physical preparation of metal–oxide composite particles under vacuum, 147

Pattern classification
particle shape characterization using image analysis and neural networks, 217
Phase diagrams
effect of pipe orientation on dense-phase transport. I. Critical angle in inclined upflow, 115
Phase transition
mechanical activation of the gamma to alpha transition in $Al_2O_3$, 49
Pipe bends
determination of the pressure drop coefficients in gas–solid diphasic flow in sharp bends, 123
Pneumatic conveying
effect of pipe orientation on dense-phase transport. I. Critical angle in inclined upflow, 115
determination of the pressure drop coefficients in gas–solid diphasic flow in sharp bends, 123
measurement of solids deposition in pneumatic conveying, 131
numerical prediction of saltation velocity for gas–solid two-phase flow in a horizontal pipe, 141
Poly(ethylene)
thermal and mechanical properties of copper powder filled poly(ethylene) composites, 63
Pore structure
examination of various pore size zirconias for potential chromatographic applications, 17
Precipitation
precipitation of calcium carbonate in a calcium nitrate and monoethanolamine solution, 69
Pressure drop
determination of the pressure drop coefficients in gas–solid diphasic flow in sharp bends, 123

Saltation velocity
numerical prediction of saltation velocity for gas–solid two-phase flow in a horizontal pipe, 141
Sedimentation
investigation and modelling of sedimentation of mixed particles, 43
Separation
investigation and modelling of sedimentation of mixed particles, 43
Settling
numerical prediction of saltation velocity for gas–solid two-phase flow in a horizontal pipe, 141
Shape characterization
particle shape characterization using image analysis and neural networks, 217
Size distribution
effect of the size distribution of spheroidal particles on the surface structure of a filter cake, 105
size analysis of fine particle suspensions by spectral turbidimetry: potential and limits, 197
Slurries
formation rates of characteristic carbon phases during fuel–water slurry injection in a hot fluidized bed, 237
Spheroids
effect of the size distribution of spheroidal particles on the surface structure of a filter cake, 105
Suspensions
investigation and modelling of sedimentation of mixed particles, 43
determination of the pressure drop coefficients in gas–solid diphasic flow in sharp bends, 123
numerical prediction of saltation velocity for gas–solid two-phase flow in a horizontal pipe, 141
size analysis of fine particle suspensions by spectral turbidimetry: potential and limits, 197
gas–solid suspensions flowing through a granular bed, 229

Tensile strength
tensile strength of wet granular materials, 83
Thermal conductivity
thermal and mechanical properties of copper powder filled poly(ethylene) composites, 63
Transport
effect of pipe orientation on dense-phase transport. I. Critical angle in inclined upflow, 115
Turbidimetry
size analysis of fine particle suspensions by spectral turbidimetry: potential and limits, 197

Vacuum processing
physical preparation of metal–oxide composite particles under vacuum, 147
Valves
behavior of gas–solid flow in the downcomer of a circulating fluidized bed reactor with a V-valve, 11
Voidage
investigation and modelling of sedimentation of mixed particles, 43

Wet particulate materials
elastic and cohesive properties of wet particulate materials, 157
Wet solids
tensile strength of wet granular materials, 83